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Total sales of rubber sector is US$ 4.16bn in 2012

Figure 1: Rubber sector structure & value chain

Key players are subsidiaries of VRG. Recently, some private local companies have tapped in this sector, e.g. HAG, GMD, QCG by planting rubber trees in Vietnam, Laos and Cambodia.

In Vietnam, 3 main types of processed rubber materials are:
- Rubber block;
- Rubber RSS (Ribbed Smoked sheet); and
- Rubber latex.

Key players are BRC and Ruthimex.

Key players are DRC, CSM & SRC.
**Sector Structure and Description | Market Size and Growth**

**85% of processed rubber materials is exported**

Figure 2: Rubber Export by countries as of Q1/2013

- China: 47%
- Malaysia: 15%
- Taiwan: 18%
- India: 4%
- Germany: 4%
- South Korea: 4%
- US: 4%
- Others: 4%

Source: StoxPlus from VRG

Figure 3: Rubber Export Value (US$bn)

- 2009: US$1.23 bn
- 2010: US$2.39 bn
- 2011: US$3.23 bn
- 2012: US$2.86 bn

Source: StoxPlus from VRG

- After plantation & processing stage, 85% of processed rubber materials is exported and the rest 15% is used for domestic manufacturing of rubber end-products.
- Total Rubber Export Value is US$ 2.86 bn in 2012. Currently, China is Vietnam’s major rubber export partner with 47% of total export value.
Rubber Plantation & Processing

Rubber Plantation & Processing segment is the key with dominant is Vietnam Rubber Group (“VRG”)

Position of Vietnam rubber materials in worldwide market (see figure 2-3)

Competition dynamics

• VRG plays an important role in strategy management of the Vietnam rubber plantation & processing segment. VRG is currently managing 262,627 ha in Vietnam.

• VRG currently has 44 factories and processing units, total capacity is 433,000 tons/year..

• Of top 10 rubber plantation & processing companies, (in term of total plantation area), top 7 are subsidiaries of VRG.

• GMD and HAG are the two listed and not State-owned enterprises recently tapping in this segment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rubber plantation area</th>
<th>Extracting area</th>
<th>Extracting volume</th>
<th>Productivity</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>'000 ha</td>
<td>'000 ha</td>
<td>'000 tons</td>
<td>ton/ha</td>
</tr>
<tr>
<td>2012</td>
<td>910.5</td>
<td>505.8</td>
<td>863.6</td>
<td>1.71</td>
</tr>
<tr>
<td>2011</td>
<td>834.2</td>
<td>471.9</td>
<td>811.6</td>
<td>1.72</td>
</tr>
<tr>
<td>2010</td>
<td>748.7</td>
<td>439.1</td>
<td>751.7</td>
<td>1.71</td>
</tr>
<tr>
<td>2009</td>
<td>677.7</td>
<td>418.9</td>
<td>711.3</td>
<td>1.70</td>
</tr>
<tr>
<td>2008</td>
<td>631.5</td>
<td>399.1</td>
<td>660.0</td>
<td>1.65</td>
</tr>
<tr>
<td>2007</td>
<td>556.3</td>
<td>377.8</td>
<td>605.8</td>
<td>1.60</td>
</tr>
</tbody>
</table>

Source: StoxPlus from GSO

Figure 4: Vietnam ranked 5th in rubber extracting volume (2012)

Figure 5: Vietnam ranked 4th in rubber exporting volume (2012)

Source: StoxPlus from Agroinfo, FPTS
Rubber Plantation & Processing

In the period of 2015 - 2020, Vietnam total rubber plantation area will likely reach 1mn ha.

In the period of 2015 - 2020, Vietnam total rubber plantation area will likely reach 1mn ha. Mekong River Delta is the biggest rubber plantation region in Vietnam with 390,000 ha equivalent to 46% of total area in the whole country. Following is Central Highland with 280,000 ha (28% of total area).

Source: StoxPlus
Rubber Plantation & Processing

Cambodia is the Vietnam major import partner with 59% of market share

Figure 7: Rubber Materials Importing Volume & Value 2010 - 2012

Source: StoxPlus from VRG

- In 2012, Vietnam imported 302,000 tons rubber materials (decreased 16.6% compared with 2011), with total value of US$803.29mn (decreased 14.9% compared with 2011).

- Each year, volume of imported rubber materials is high because Vietnam still lacks of some types of rubber materials for domestic manufacturing. Besides, 60% of the total import volume is re-exporting, while 40% is for domestic manufacturing.

Figure 8: Rubber Materials Importing Volume By Countries 2012

Source: StoxPlus from VRG
Gemadept Rubber Business and HAG’s Rubber Business

**Gemadept Rubber Business**

**Factsheet:**
- Planned plantation Area: 30,000 hectas
- Location: KohNhek district, MondulKiri province, Campuchia
- Estimated investment capital required: US$150 million, meaning investment per hecta: US$5,000.
- Time: 50 years
- About 800 ha planted in 2011.

**Investment Plan:**
- The capex investment for the rubber is US$44.2 million in the first 6 years 2011-2016 which accounted for roughly 45% total capex of GMD. This investment is required for 10,000 hectas new plantation.

**HAG’s Rubber Business**

**Overview:**
HAG occupies 51,000ha in Laos, Campuchia and Vietnam. Rubber has been a good catalyst for investors helping HAG raise US$145M fund recently.

**StoxPlus’s comments:**
- The 51,000 hectares rubber business model of HAG has been valued at about US$500M-US$600M based on DCF model by several institutional investors. Meaning US$10,000 per hectares of 5-7 year life planted rubbers
- Key assumptions:
  - Plantation Yield: 1.7 tonnes/ha (1,700 kg/ha)
  - Rubber price of US$4.0/kg.
  - Capex budgeted US$140M for 2012-2017. Discount rate: 16%
Vietnam tires & tubes manufacturing market is still small

Segment size & growth

• Tires & tubes accounts for 70% of rubber manufacturing segment. The rest are technical rubber and other rubber end-products.

• Vietnam tires & tubes manufacturing market is pretty small, about US$800mn, only about 0.34% of world tires & tubes market.

• However, growth in this segment is very potential. It is estimated that worldwide demand for automobiles tires will grow 2%/year. Demand for Vietnam tires & tubes market will be much higher.

Trend

• Radial will become major trend, replacing Bias tires. Radial tires are twice stable, reducing energy consumption, lower heat generation and double duration compared with traditional Bias tires.

Figure 9: Value Structure of Vietnam Tires & Tubes Market

Source: StoxPlus from BVSC
Rubber Product Manufacturing

Main manufacturers are Danang Rubber, Casumina, Sao Vang Rubber

Competition dynamic

- The tires & tubes Vietnam market is concentrated, divided into 2 main groups: group of Vinachem (CSM, DRC, SRC) and group of other FDI and JV companies.

- When the number of automobiles (especially cars) increases rapidly in recent years, total market share of Vinachem fell dramatically, only 40.7% in 2012. Because cars mainly use Radial tires. Domestic players are not strong at Radial tires thus they lose all cars segment to foreign brands.

- However, Vinachem are still holding strong positions in specific tires products.

Figure 14: Competition dynamic in rubber manufacturing segment

This segment is dominated by foreign brands, e.g. Yokohama, Kumho, Bridgestone…. CSM & DRC just tapped in this segments with tiny market share.

Since most coaches and trucks use Bias tires, this segment is dominated by domestic players.

CSM, DRC and SRC dominates this segment, There are 3 foreign players tapped in this segment, namely Cheng Shin, Inoue and Kenda, focusing on OEM while domestic players focus on replacement.

Only SRC tapped in this segment, however value of Vietnam airplanes tires segment is very small.

Note: Others include: Michelin, Bridgestone, Kumho, Yokohama and some cheap Chinese tires brands.

Figure 13: 2012 Market Share

Source: StoxPlus from BVSC.
## Sector Summary

<table>
<thead>
<tr>
<th>No</th>
<th>Content</th>
<th>Sector Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Market Size and Potential Growth</strong></td>
<td>Total sales of rubber sector is US$4.16bn in 2012. Vietnam’s natural rubber sector has little organic growth in the next few years. Most listed rubber companies are facing declining plantations as they can be too old or replanted areas are not ready for yielding. The revenue growth can only come from increasing rubber prices, which Vietnam has no impact or influence on.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Segmentation Analysis</strong></td>
<td>Plantation &amp; processing is the largest segment amounting to US$3.36bn, mainly from export. Manufacturing is just US$0.8bn with few players namely Dang Nang Rubber JSC, Casumina JSC, Sao Vang Rubber JSC. 85% of processed rubber materials is exported and the rest 15% is used for domestic manufacturing of rubber end-products.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Competition Dynamics</strong></td>
<td>Rubber is a commodity based sector i.e. profitability of plantation players depends heavily on the fluctuation of global rubber prices. Productivity also depends on the age of rubber trees.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Foreign ownership</strong></td>
<td>There are no foreign ownership restriction in a rubber business companies if it is not a public company. For SOE rubber companies, maximum foreign ownership is also 49%. However, for any new investment license in rubber plantation areas, it is subject to a careful review and approval of Ministry of Defence, Ministry of Public Security and Ministry of Natural Resources and Environment (Decree 108/2006).</td>
</tr>
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</table>
Introduction about StoxPlus Corporation and Research Capability
Overview about StoxPlus
Areas of Existing Business

- Pioneer in data feed services to financial sector in Vietnam
- A sustainable client portfolio including top 10 brokerage firms, financial websites such as Forbes Vietnam
- Financial IT solutions: financial website solutions for financial sector and Investor Relations web for corporate sector

• An in-house built analytic platform for institutional investors and sophisticated investors

- A team of seasoned professionals delivering market research, company research and market entry services
- Clients include Fortune 500 company
Overview about StoxPlus
Research Services

→ Our Research division has been established as an independent research house in Vietnam to provide local insights to our clients at quality standards of the World’s prestige advisory firms.

→ Our research team with a team of 5 experienced analysts and researchers with CFA Charterholders, ACCA Chartered Accountants and MBAs with extensive experience in investment, banking, corporate finance and technology with well respected firms in the United Kingdom, Australia and Vietnam.

→ Our research services consists of
  → Standard research reports (ready for sales via our website www.stoxresearch.com ); and
  → Customisable services based on specific requirements

→ Our team covers all key sectors of Vietnam including Financials, Logistics, Healthcare, Homebuilding, etc

→ Our research clients are mostly foreign institutional investors and industry players who are penetrating into Vietnam.

Selection of our Regular Research Clients:
We provide sector research reports for all key industries as well as comprehensive analysis and local insights customized for your Vietnam market entry solutions. Our research services include:

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<th>Market Entry Advisory</th>
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<td>• Market assessment</td>
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<tr>
<td>• Market sizing &amp; segmentation</td>
<td>• Competition analysis</td>
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<td>• Vendors, outsourcers and distributors search</td>
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<td>• Regulatory and policy framework</td>
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<td>• Key player profiles</td>
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Industries we regularly cover:

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<th>Healthcare Sector</th>
<th>Consumerism</th>
<th>Construction &amp; others</th>
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<td>• Hospital operation</td>
<td>• Beers</td>
<td>• Home builders</td>
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<td>• Retail banking and home credit</td>
<td>• Drugs</td>
<td>• Soft drinks</td>
<td>• Cement and concrete</td>
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<td>• Insurance</td>
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<td>• Laboratory/medical testing</td>
<td>• Pharmaceutical</td>
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<td></td>
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### About StoxPlus

**StoxPlus has been engaged in many assignments covering a wide range of industries**

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<tr>
<td><strong>Korea</strong></td>
<td>SK Group Investment Screening Research on 10 key sectors of Vietnam and SOE IPOs to assess investment opportunities</td>
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<tr>
<td><strong>Korea</strong></td>
<td>SK Group Healthcare Market research on Vietnam hospital operation businesses and diagnostic service segment: help client fully understand the market and defined entry options</td>
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<td><strong>Singapore</strong></td>
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<tr>
<td><strong>Japan</strong></td>
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<tr>
<td><strong>Singapore</strong></td>
<td>Happiness International Hospital Hospital &amp; Clinics Market research of imaging diagnosis market in HCMC and in-depth analysis of selected players</td>
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<tr>
<td><strong>Japan</strong></td>
<td>Maruhan Corporation Banking Market Research for Banking sector in Vietnam and insightful analysis of shortlisted players</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>Japan Knowledge Incorporation Consumer Finance Vietnam Consumer Finance Market Report and Define Entry Options for a Japanese Financial Institution</td>
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